

AMENDMENTS TO THE CLAIMS

1. – 36. (Canceled)

37. (New) A co-culturing carrier with a fertilized ovum of an animal comprising a cell incorporated type three-dimensionally reconstructed tissue for co-culturing the fertilized ovum of an animal for the purpose of adhesion and three-dimensional growth of the fertilized ovum, and wherein

the cell incorporated type three-dimensionally reconstructed tissue can become a scaffold for growing a three-dimensional tissue derived from the fertilized ovum, and

the cell incorporated type three-dimensionally reconstructed tissue is tissue/organ engineered from one or more biological materials selected from the group consisting of cells, tissues, and organs, and

wherein the cell incorporated type three-dimensionally reconstructed tissue further comprises at least one cell, at least one extracellular matrix components and at least one mesh networks obtained by co-culturing said at least one cell with at least one gelated extracellular matrix components and at least one mesh networks.

38. (New) The co-culturing carrier according to claim 37, wherein the cells to be incorporated in the cell incorporated type three-dimensionally reconstructed tissue are cells obtained from an animal that is homogeneous or heterogeneous to the fertilized ovum.

39. (New) The co-culturing carrier according to claim 37, wherein the cells to be incorporated in the cell incorporated type three-dimensionally reconstructed tissue are cells obtained from an endometrium.

40. (New) The co-culturing carrier according to claim 39, wherein said cells obtained from an endometrium are bovine endometrial epithelial cells or bovine stromal cells.

41. (New) The co-culturing carrier according to claim 40, wherein said cells obtained from an endometrium are bovine endometrial epithelial cells.

42. (New) The co-culturing carrier according to claim 40, wherein said cells obtained from an endometrium are bovine stromal cells.

43. (New) The co-culturing carrier according to claim 37, wherein the cell to be incorporated in the cell incorporated type three-dimensionally reconstructed tissue is pretreated with mitomycin C.

44. (New) The co-culturing carrier according to claim 37, wherein the extracellular matrix components are collagen gel.

45. (New) The co-culturing carrier according to claim 37, wherein the mesh network is composed of one or more natural or synthetic threads and/or a woven mass thereof.

46. (New) The co-culturing carrier according to claim 37, wherein the mesh network is bioabsorptive.

47. (New) A method of culturing a fertilized ovum of an animal, comprising

introducing the co-culturing carrier according to claim 37 into a culture vessel,
placing the fertilized ovum on the co-culturing carrier and
culturing the fertilized ovum of an animal with feeding a culture medium to the
fertilized ovum and the cells incorporated in the co-culturing carrier.

48. (New) A method of culturing a fertilized ovum of an animal, comprising
introducing the co-culturing carrier according to claim 38 into a culture vessel,
placing the fertilized ovum on the co-culturing carrier and
culturing the fertilized ovum of an animal with feeding a culture medium to the
fertilized ovum and the cells incorporated in the co-culturing carrier.

49. (New) A method of culturing a fertilized ovum of an animal, comprising
introducing the co-culturing carrier according to claim 39 into a culture vessel,
placing the fertilized ovum on the co-culturing carrier and
culturing the fertilized ovum of an animal with feeding a culture medium to the
fertilized ovum and the cells incorporated in the co-culturing carrier.

50. (New) A method of culturing a fertilized ovum of an animal, comprising
introducing the co-culturing carrier according to claim 40 into a culture vessel,
placing the fertilized ovum on the co-culturing carrier and
culturing the fertilized ovum of an animal with feeding a culture medium to the
fertilized ovum and the cells incorporated in the co-culturing carrier.

51. (New) A method of culturing a fertilized ovum of an animal, comprising

introducing the co-culturing carrier according to claim 41 into a culture vessel,
placing the fertilized ovum on the co-culturing carrier and
culturing the fertilized ovum of an animal with feeding a culture medium to the
fertilized ovum and the cells incorporated in the co-culturing carrier.

52. (New) A method of culturing a fertilized ovum of an animal, comprising
introducing the co-culturing carrier according to claim 42 into a culture vessel,
placing the fertilized ovum on the co-culturing carrier and
culturing the fertilized ovum of an animal with feeding a culture medium to the
fertilized ovum and the cells incorporated in the co-culturing carrier.

53. (New) A method of culturing a fertilized ovum of an animal, comprising
introducing the co-culturing carrier according to claim 43 into a culture vessel,
placing the fertilized ovum on the co-culturing carrier and
culturing the fertilized ovum of an animal with feeding a culture medium to the
fertilized ovum and the cells incorporated in the co-culturing carrier.

54. (New) A method of culturing a fertilized ovum of an animal, comprising
introducing the co-culturing carrier according to claim 44 into a culture vessel,
placing the fertilized ovum on the co-culturing carrier and
culturing the fertilized ovum of an animal with feeding a culture medium to the
fertilized ovum and the cells incorporated in the co-culturing carrier.

55. (New) A method of culturing a fertilized ovum of an animal, comprising

introducing the co-culturing carrier according to claim 45 into a culture vessel,
placing the fertilized ovum on the co-culturing carrier and
culturing the fertilized ovum of an animal with feeding a culture medium to the
fertilized ovum and the cells incorporated in the co-culturing carrier.

56. (New) A method of culturing a fertilized ovum of an animal, comprising
introducing the co-culturing carrier according to claim 46 into a culture vessel,
placing the fertilized ovum on the co-culturing carrier and
culturing the fertilized ovum of an animal with feeding a culture medium to the
fertilized ovum and the cells incorporated in the co-culturing carrier.

SUPPORT FOR THE AMENDMENTS

Claims 1-3, 7, 10, 11, 13, 17-20, 22, 24-26 28, 32, 33, and 36 were previously canceled

Claims 4-6, 8, 9, 12, 14-16, 21, 23, 27, 29-31, 34, and 35 have been canceled.

Claims 37-56 added.

New Claims 37-56 are supported by Examples of the present specification and the disclosure at page 16, line 19 to page 17, line 6.

No new matter has been introduced by virtue of the amendment presented herein.